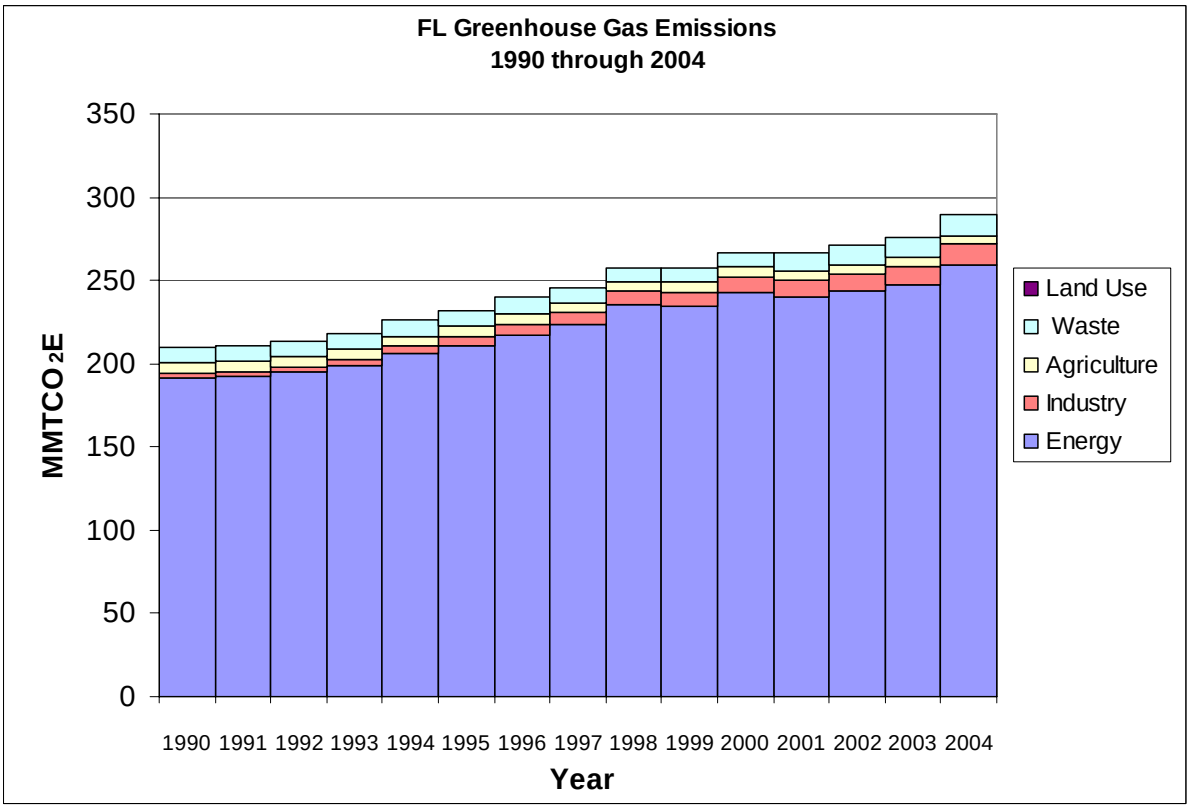
FLORIDA GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The Florida Department of Environmental Protection report, *Preliminary Inventory of Florida Greenhouse Gas Emissions: 1990-2004,* provides estimates for Florida's greenhouse gases (GHG) by sector for 1990 through 2004.[1]

In 1990, Florida emitted GHGs in the amount of 209.5 million metric tons carbon dioxide equivalent ($MMTCO_2E$). In 2004, GHG emissions from Florida increased by 38 percent of 1990 levels to 289.1 $MMTCO_2E$.

Emissions from the energy sector, which constitutes the majority (90 percent) of gross GHG emissions, increased by 36 percent between 1990 and 2004. This was mostly a result of the growth of CO_2 from fossil fuel combustion which is comprised largely of the utility and transportation sub-sectors (49 and 43 percent, respectively).

The emissions resulting from land-use change and forestry were not included in the state inventory report due to limited data availability.

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[1] Historical GHG emission estimates (1990 through 2004) were estimated using a set of generally-accepted principles and guidelines for state greenhouse gas emission estimates, with adjustments to provide Florida-specific data and inputs when it was possible to do so. The inventory was developed using the U.S. Environmental Protection Agency's (EPA's) State Inventory Tool.

$MMTCO_2E$	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
CO_2	**191.0**	**191.7**	**194.6**	**198.8**	**207.0**	**211.8**	**218.6**	**224.6**	**237.3**	**236.6**	**245.1**	**243.8**	**248.1**	**252.3**	**265.3**
Energy	188.2	188.9	191.3	195.1	202.6	207.3	213.8	219.4	232.0	231.2	239.4	237.0	240.1	244.2	256.3
Industrial Processes	1.4	1.4	1.5	1.8	2.0	2.2	2.3	3.3	3.4	3.4	3.6	3.7	3.8	3.9	4.4
Land Use	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Waste	1.4	1.3	1.8	1.9	2.4	2.3	2.5	1.9	1.9	2.0	2.1	3.1	4.1	4.3	4.5
CH_4	**10.4**	**10.5**	**10.6**	**10.4**	**10.1**	**10.3**	**10.2**	**9.5**	**8.4**	**8.6**	**9.1**	**9.6**	**9.5**	**9.6**	**9.8**
Energy	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Agriculture	3.1	3.2	3.2	3.2	3.3	3.3	3.1	3.1	3.0	2.9	2.9	2.9	2.9	2.8	2.8
Land Use	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Waste	6.6	6.8	6.8	6.7	6.4	6.5	6.6	6.0	5.0	5.3	5.7	6.3	6.2	6.4	6.7
N_2O	**6.6**	**6.7**	**6.9**	**7.4**	**6.6**	**7.0**	**7.3**	**6.9**	**6.9**	**6.7**	**7.0**	**6.9**	**6.8**	**6.6**	**6.2**
Energy	2.7	2.9	3.1	3.1	3.2	3.3	3.3	3.3	3.3	3.2	3.3	3.1	3.2	3.1	2.9
Industrial Processes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Agriculture	3.2	3.1	3.0	3.5	2.6	2.9	3.1	2.7	2.7	2.6	2.7	2.8	2.5	2.5	2.3
Land Use	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Waste	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1
HFCs, PFCs, and SF6	**1.5**	**1.4**	**1.6**	**1.8**	**2.1**	**3.0**	**3.6**	**4.2**	**4.6**	**5.0**	**5.6**	**6.1**	**6.6**	**7.2**	**7.8**
Industrial Processes	1.5	1.4	1.6	1.8	2.1	3.0	3.6	4.2	4.6	5.0	5.6	6.1	6.6	7.2	7.8
Net Emissions	**209.5**	**210.3**	**213.6**	**218.4**	**225.9**	**232.1**	**239.6**	**245.3**	**257.2**	**256.9**	**266.7**	**266.3**	**270.9**	**275.7**	**289.1**

Note: Totals may differ from the sum of the sources due to independent rounding.
An asterisk (*) indicates emissions of the gas from this sector were zero, insignificant, or not reported.
All emissions are reported in million metric tons of carbon equivalent ($MMTCO_2E$).

Over the 15-year period, carbon dioxide (CO_2) emissions accounted for over 90 % of Florida's GHG emissions and have increased each year since 1990. The energy sector was the main contributor of CO_2 emissions (over 97 % in 2004). Methane (CH_4) was the second largest contributor to Florida's GHG emissions and has remained relatively constant between 1990 and 2004. Methane emissions came mostly from enteric fermentation within the agriculture sector (22 % in 2004) and landfills within the waste management sector (55 % in 2004). The third largest contributor to Florida's GHG emissions, Nitrous Oxide (N_2O), also remained relatively constant throughout the 15-year period. Significant contributors for this gas were mobile combustion emissions and agricultural soil management emissions (each representing 35 % in 2004). Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) contributed the smallest share of total GHG emissions for Florida but between 1990 and 2004 increased by over 400 % of 1990 levels. This increase in HFCs, PFCs and SF_6 emissions within the industrial processes sector is largely due to the replacement of ozone-depleting substances (CFCs) with HFCs, which have high global warming potentials.

Gross per capita emissions from Florida were 16 $MTCO_2E$ in 1990 and increased to 17 $MTCO_2E$ in 2004. Per capita emissions were less than the gross national per capita average of 25 $MTCO_2E$ in both years.